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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/577,558 05/24/00 BARANDA

P OT-4190B

EXAMINER

PM82/0214

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TRAN, T

ART UNIT

PAPER NUMBER

3652

DATE MAILED:

02/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/577,558

Applicant(s)
Baranda et al.

Examiner
Thuy V. Tran

Group Art Unit
3652



☒ Responsive to communication(s) filed on Dec 27, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 44-57 and 66-79 is/are pending in the application.

Of the above, claim(s) 46-48, 55, 57, 68-70, 77, and 79 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 44, 45, 49-54, 56, 66, 67, 71-76, and 78 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3652

DETAILED ACTION

Election/Restriction

1. Claims 46-48, 57, 59, 68-70, 77 and 79 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 3.
2. Applicant's election with traverse of group B, claims 56 and 78 in Paper No. 3 is acknowledged. The traversal is on the ground(s) that the various embodiments are so closely related as not to require separate fields of search. This is not found persuasive because 1) Species are independent; and 2) Applicants have not proven that the disclosed Species are not patentable distinct.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

3. Applicant is advised that should claims 44-57 be found allowable, claims 66-79 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Art Unit: 3652

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 44, 45, 49-54, 56, 66, 67, 71-76 and 78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears in the preamble of independent claims 44 and 66, respectively, that applicant intends to claim "a sheave" as the subcombination of "an elevator system" while in the body of the claims there are positive recital of structure indicating that the combination of the combination of a sheave and an elevator system are being claimed, e.g., in claim 44, lines 1-6, "the elevator system including one or more tension members, each tension member having a width w, a thickness t measured in the bending direction, and an engagement surface defined by the width of the tension member, wherein the tension member has an aspect ratio, defined as the ratio of the width w to the thickness, of greater than one", in claim 45, lines 1-2, "wherein the elevator system further includes a car and counter weight interconnected by the tension members", and in claim 66, lines 1-6, "the elevator system including one more (Note, "more" should be deleted) tension member deflected by the sheave, each tension member having a width, a thickness measured in the bending direction, and an engagement surface spanning the width of the tension member, wherein

Art Unit: 3652

each tension member has an aspect ratio, defined as the ratio of the width to the thickness of greater than one”.

Therefore, it is unclear if applicant's intent is to claim merely the sheave or the sheave in combination with the elevator system. Because the preambles have set forth as “a sheave for an elevator system”, the claims will be examined as subcombination.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 44, 45, 49, 50, 53, 54, 56, 66, 67, 71, 72, 75, 76 and 78 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,127,934.

GB '934 discloses a sheave 4 for an elevator system comprising a traction surface liner 15 formed from polyurethane which is bonded to the sheave, a pair of retaining rims 16 on opposite sides of the sheaves.

Re claims 50 and 72, the sheave 4 includes a plurality of surfaces 15 G and one or more dividers 13 that separate the plurality of surfaces.

Art Unit: 3652

8. Claims 44, 45, 49, 50, 53, 56, 66, 67, 71, 72, 75 and 78 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by SU 1491804 A.

SU '804 discloses a sheave for an elevator system comprising a plurality of traction surfaces, a plurality of dividers 10 that separate the surfaces.

Re claims 53, 56, 75 and 78, the surface is formed from a non-metallic coating bonded to the sheave.

9. Claims 44, 45, 49, 53, 56, 66, 67, 71, 75 and 78 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Pearson 1,164,115.

Pearson '115 discloses a sheave 10 for an elevator system comprising non-metallic coating surface 14 bonded to the sheave, and pair of retaining rims 13 on opposite sides of the sheave.

10. Claims 44, 49, 50, 51, 52, 66, 71-74 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Sapozhnikov et al. 3,910,559.

Sapozhnikov et al. '559 disclose a sheave having a plurality of surfaces, a plurality of dividers that separate the surfaces, and a roller disposed proximate to the surface in rolling contact with the tension member.

11. Claims 44, 45, 49, 51, 52, 66, 67, 71, 73 and 74 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Morris et al. 4,620,615.

Art Unit: 3652

Morris et al. '615 disclose a sheave comprising a traction surface, a pair of retaining rims on opposite sides of the sheave, a roller disposed proximate to the traction surface in rolling contact with the tension member.

12. Claims 44, 45, 49, 50, 53, 56, 66, 67, 71, 72, 75 and 78 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Greening 2,017,149.

Greening '149 discloses a sheave comprising a coating traction surface formed from a non-metallic material bonded to the sheave, a pair of retaining rims on opposite sides of the sheave, the surface includes a plurality of dividers and one or more dividers that separate the surfaces.

13. Claims 44, 45, 49, 50, 53, 66, 67, 71, 72 and 75 (as best understood) are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bruns 3,279,762. (See drawing figures)

14. Claims 44, 45, 49, 51-53, 66, 67, 71 and 73-75 (as best understood) are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Patterson, Jr. 2,326,670. (See drawing figures and page 2, column 1, lines 9-50)

15. Claims 44, 45, 49, 53, 54, 56, 66, 67, 71, 75, 76 and 78 (as best understood) are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rauscher 4,292,723.

Note, Rauscher's sheave is capable of being used in an elevator system as broadly claimed.

Art Unit: 3652

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 51, 52, 73 and 74 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson 1, 164,115 in view of either Patterson, Jr 2,326,670, Sapozhnikov et al 3,910,559 or Morris et al 4,620,615.

Pearson '115 discloses all the claimed limitations except for having a guidance device including a roller disposed proximate to the sheave surface.

Each of the Patterson, Jr '670, Sapozhnikov et al '559 and Morris et al '615 references separately discloses a guidance device including a roller disposed proximate to the surface of the sheave to hold down the rope to the sheave.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized a guidance device as disclosed by Patterson, Sapozhnikov or Morris reference for the traction sheave of Pearson in order to keep the rope from slipping over the drum.

Art Unit: 3652

18. Claims 54 and 76 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over either Bruns 3,279,762 or Pearson 1,164,115 in view of O'Donnell et al. 5,112,933.

Bruns '762 and Pearson '115 separately discloses a sheave having a liner formed from a non-metallic material. Both Bruns and Pearson do not disclose a liner formed from polyurethane.

O'Donnell et al '933 disclose that using a sheave liner formed from polyurethane would prolong service life, resist degradation caused by exposure to heat, etc. (Column 2, lines 40-43). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized a polyurethane liner for the sheave of Bruns and Pearson as taught and suggested by O'Donnell et al in order to prolong service life and resist degradation caused by exposure to heat and humidity.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of the cited references separately discloses a traction sheave.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy v. Tran whose telephone number is (703) 308-2558.

TVT (TVT)

February 9, 2001


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